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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,691	08/21/2001	Nobuaki Ema	10830-074001	6398

26211 7590 02/13/2003

FISH & RICHARDSON P.C.
45 ROCKEFELLER PLAZA, SUITE 2800
NEW YORK, NY 10111

EXAMINER

STOCK JR, GORDON J

ART UNIT PAPER NUMBER

2877

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,691

Applicant(s)

EMA, NOBUAKI

Examiner

Gordon J Stock

Art Unit

2877

-- Th MAILING DATE of this communication app ars on th cover sheet with th correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: .

DETAILED ACTION

Drawings

1. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **100** in Figure 3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's disclosure of prior related art in view of **Carlisle et al. (6,024,498)**.

As to **claim 1**, the applicant's disclosure teaches prior art apparatus comprising: a measurement unit for measuring an optical output signal output from the optical component (Fig. 3, 104 and 106 of applicant's disclosure); a first optical fiber which is connected to an input terminal of the optical component under test and inputs the measurement optical signal to the optical component (Fig. 3, 102 of applicant's disclosure); a second optical fiber which is connected to an output terminal of the optical component under test and transfers, to the measurement unit, an optical output signal output from the optical component under test (Fig. 3, 103 of applicant's disclosure); a position controller for adjusting relative positions between the first optical fiber, second optical fiber, and connective sections of the optical component such that insertion loss becomes a minimum (page 2 of applicant's disclosure). Applicant's disclosure is silent concerning the positioning to a maximum signal but discloses in prior art that there is positioning until insertion loss is minimized. However, Carlisle in fiber connector assembly teaches that achieving maximum signal transfer (minimum insertion loss) is a function of alignment of fiber cores. Therefore, it would be obvious to one skilled in the art that the connections are adjusted until the signal becomes maximum because the connections are adjusted until minimum insertion loss occurs which is equivalent to having maximum signal transfer achieved.

As to **claim 5**, the applicant's disclosure teaches a prior related art method comprising: inputting a measurement optical signal to the optical component under test by way of a first optical fiber connected to an input terminal of the optical component under test; transmitting an optical signal output from the measurement optical component by way of a second optical fiber connected to an output terminal of the optical component under test; measuring an optical output

Art Unit: 2877

signal output from the optical component under test on the basis of the optical output signal transmitted by way of the second optical fiber; adjusting relative positions between the first and second optical fibers and connections of the optical component under test such that insertion loss is minimized (Fig. 3 and page 2 of applicant's disclosure). Applicant's disclosure is silent concerning the positioning to a maximum signal but discloses in prior art that there is positioning until insertion loss is minimized. However, Carlisle in fiber connector assembly teaches that achieving maximum signal transfer (minimum insertion loss) is a function of alignment of fiber cores. Therefore, it would be obvious to one skilled in the art that the connections are adjusted until the signal becomes maximum because the connections are adjusted until minimum insertion loss occurs which is equivalent to having maximum signal transfer achieved.

6. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's disclosure of prior related art in view of **Carlisle et al. (6,024,498)** and further in view of **Kakii et al. (4,830,490)**.

As to **claim 2**, applicant's disclosure of prior related art in view of Carlisle discloses everything as above (see claim 1). In addition, applicant's disclosure teaches the optical component has a plurality of output terminals and measurement equipment (power meters) (page 3; lines 1-6 of applicant's disclosure). Applicant's disclosure of prior related art is silent concerning a plurality of photodetectors. However, Kakii teaches in an apparatus for aligning optical fibers that power meters are used with photodetectors (col. 1, lines 25-30). Therefore, it would be obvious to one skilled in the art at the time the invention was made that when the optical component has a plurality of output terminals and power meters for each output terminal it would have a plurality of photodetectors associated with each power meter in order for the

Art Unit: 2877

power meter to display the light levels detected by the associated photodetector. As for a plurality of output terminals coupled to photodetectors via second optical fibers, Examiner takes Official Notice that optical fibers are well known in the art for optical coupling. It would be obvious to one skilled in the art at the time the invention was made to have the output terminals of the component under test be connected to the photodetectors via fiber coupling in order to transmit the optical signal from the component to the photodetector.

7. **Claims 3 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's disclosure of prior related art in view of **Carlisle et al. (6,024,498)** further in view of **Kakii et al. (4,830,490)** and further in view of **Rabinski (6,480,651)**.

As to **claim 3**, applicant's disclosure of prior related art in view of Carlisle and Kakii disclose everything as above (see **claim 2**). However, they are silent concerning switches. Rabinski in a method for aligning optical components teaches using a detector switch to switch between different detectors and therefore different channels (col. 6, lines 52-59). Therefore, it would be obvious to one skilled in the art at the time the invention was made to have the apparatus comprise switches to switch between detectors and therefore channels.

As to **claim 4**, applicant's disclosure of prior related art in view of Carlisle and Kakii and further in view of Rabinski disclose everything as above (see **claim 3**). In addition, Kakii teaches that power meters comprise a display unit (col. 1, lines 25-30).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,253,011 to Haake

Art Unit: 2877

Fax/Telephone Numbers

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

- 1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and
- 2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (703) 308-7722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (703) 305-4787. The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

gs

February 6, 2003



Frank Font
Supervisory Patent Examiner
Art Unit 2877